

fall into a scope of this invention. Examples of such bases are provided in FIG.15(a) – FIG.15(p).

It is understood that fluorescent light source may be made with disconnectable electrical contacts to allow replacement of the light source, for example, if the ballast is designed to
5 have longer life than the light source.

I Claim:

1. A fluorescent reflector lamp comprised of:
 - a fluorescent light source;
 - 10 a reflector with a defined cavity having circumferential rim defining a light emitting opening, and said cavity having a first circumferential flange defining a mating opening having an inner diameter, and said cavity interior wall defining a reflective surface of the reflector having substantially larger diameter at the circumferential rim than at the circumferential flange.
 - 15 a lens attached to said circumferential rim of said reflector;
 - a light source base attached to said fluorescent light source; said base being inside said defined cavity of said reflector and located inside said mating opening; and said base having a second circumferential flange having an outer diameter , and said base having a first locking means;
 - 20 an electricity supply base;
 - a ballast for energizing said fluorescent light source to emit light, said ballast including power input terminals connected to said electricity supply base and output terminals connected to said fluorescent light source;
 - a ballast housing with a defined space to accommodate the electronic ballast; said ballast

housing having a second locking means; and said housing having means for attachment of said electricity supply base;

said fluorescent reflector lamp being assembled by mating of said first locking means of the light source base with said second locking means of the ballast housing;

- 5 wherein said outer diameter of the second circumferential flange of the light source base is larger than said inner diameter of the first circumferential flange of the reflector cavity; wherein light emitted by said fluorescent light source being substantially reflected by the reflecting surface of the reflector and directed out of the reflector cavity through said light emitting opening.

10

2. The device according to claim 1 wherein the fluorescent light source is made of glass tube formed in a shape of a helix having defined ends equipped with filaments wires for assembly into the light source base and connection to the ballast.

- 15 3. The device according to claim 1 wherein the fluorescent light source made of multiple glass tubes sections forming single light source having defined ends equipped with filaments wires for assembly into the light source base and connection to the ballast.

4. The device according to claim 1 wherein the fluorescent light source is made of glass tube formed in a shape of a helix and made as a closed loop without defined ends.

- 20 5. The device according to claim 1 wherein the fluorescent light source is made of multiple glass tube sections forming single light source made as closed loop without defined ends.

6. The device according to claim 1 wherein the reflector is made either of: (i) pressed glass; (ii) metal, or (iii) synthetic resin material.

7. The device according to claim 6 wherein said lamp has outline fitting substantially within the ANSI specified outline for PAR38 lamp.
8. The device according to claim 6 wherein said lamp has outline fitting substantially within the ANSI specified outline for PAR30 lamp.
- 5 9. The device according to claim 6 wherein said lamp has outline fitting substantially within the ANSI specified PAR20 lamp.
10. The device according to claim 1 wherein the lens has flat outer surface and said lens is made of any light transmitting material like glass or synthetic resin.
11. The device according to claim 1 wherein the lens has convex outer surface and said
10 lens is made of any light transmitting material like glass or synthetic resin.
12. The device according to claim 1 wherein the light source base having the first locking means as outer bump and the ballast housing having the second locking means as inner groove, and said mating of the outer bump with the inner groove resulting in as single point lock between the light source base and the ballast
15 housing.
13. The device according to claim 1 wherein the light source base having first locking means as multiple outer hooks and the ballast housing having the second locking means as multiple inner hooks, and said mating of the multiple outer hooks with the multiple inner hooks resulting in multiple point lock between the light source base
20 and the ballast housing.
14. The device according to claim 1 wherein the light source base having the first locking means as an outer thread and the ballast housing having the second locking means as an inner thread, and said mating of outer thread with the inner thread is accomplished by threading the outer thread and the inner thread to each other.

15. The device according to claim 1 wherein said electricity supply base is attached to the ballast housing by means of rivets.

16. The device according to claim 1 wherein said ballast housing having a base thread and the electricity supply base is attached to said ballast housing by means of said base thread.

17. The device according to claim 1 wherein said lamp has luminous efficacy of at least 40 Lm/W. .

18. A fluorescent reflector lamp comprised of:

a fluorescent light source;

a reflector with a defined cavity having circumferential rim defining a light emitting opening, and said cavity having a first circumferential flange defining a mating opening having an inner diameter, and said cavity interior wall defining a reflective surface of the reflector having substantially larger diameter at the circumferential rim than at the circumferential flange.

a lens attached to said circumferential rim of said reflector;

a light source base attached to said fluorescent light source; said base being inside said defined cavity of said reflector and located inside said mating opening; and said base having a second circumferential flange having an outer diameter , and said base having a first locking means;

an electricity supply base;

a remote ballast for energizing said fluorescent light source to emit light, said ballast including power input terminals and output terminals connected to said electricity supply base;

a housing with a defined shape to accommodate assembly with the reflector; said

housing having a second locking means; and said housing having means for attachment of said electricity supply base;

said fluorescent reflector lamp being assembled by mating of said first locking means of the light source base with said second locking means of the ballast housing;

5 wherein said outer diameter of the second circumferential flange of the light source base is larger than said inner diameter of the first circumferential flange of the reflector cavity;

wherein light emitted by said fluorescent light source being substantially reflected by the reflecting surface of the reflector and directed out of the reflector cavity through said light emitting opening.

10

15

20